

# Washington State Ferries

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## *Customer Survey*

### **Prepared by**

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# About Market Decisions Corporation

- ❖ Established 1978
- ❖ Over 13,000 projects for more than 700 clients
- ❖ Approximately 400 employees in 3 locations
- ❖ Major industries served:
  - High tech
  - Telecomm
  - Insurance/Financial
  - Government/Utilities
- ❖ Global full service custom research:
  - B2C and B2B
  - Quantitative and Qualitative
  - Advanced analytical capabilities





# Project Overview

- ❖ **Overall objective**: Provide WSTC with information to address its strategic, tactical and operational needs.
- ❖ **Solution**: An on-going panel of ferry riders based on stratified random sampling :
  - Ferry Route;
  - Rider Type (Recreational/Non-recreational/freight);
  - Ride Times (On-peak/Off-Peak).
- ❖ **Design Advantages**: Stratified sampling offers several advantages over simple random sampling.
  - Greater precision than a simple random sample of the same size;
  - Requires a smaller sample, thus saving money;
  - Guards against an "unrepresentative" sample;
  - Ability to ensure sufficient sample points to support a separate analysis of any subgroup.



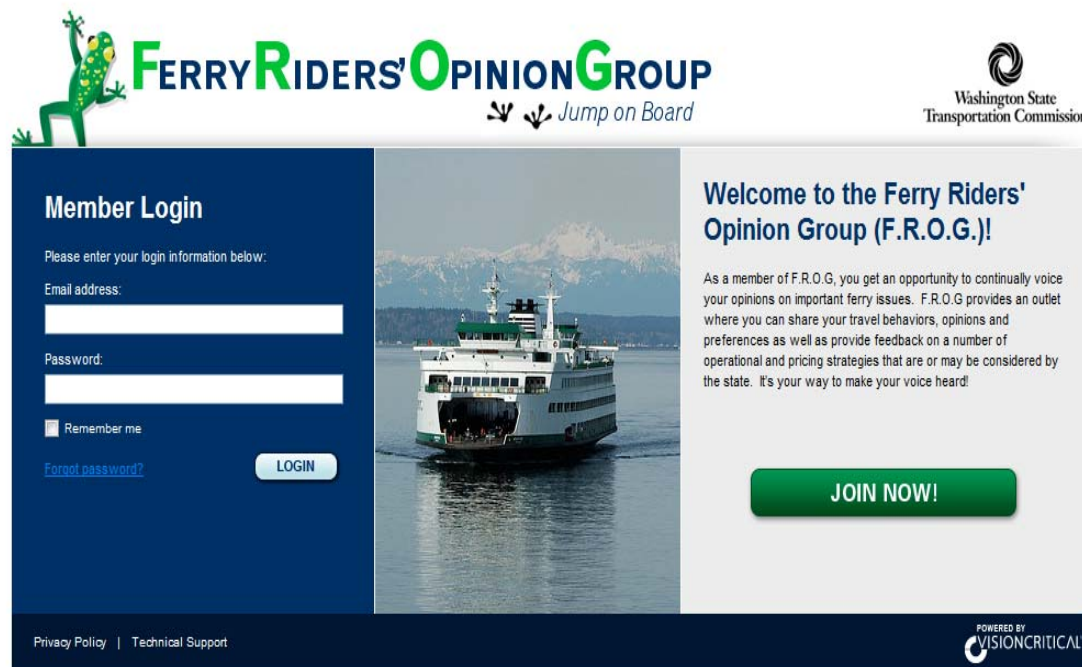
## The Ferry Riders' Opinion Group (F.R.O.G) Panel

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# Why a Panel?

- ❖ The Ferry Riders' Opinion Group is an on-line community of ferry riders representative of the customer base.
  - Allows for longitudinal tracking of attitudes and behaviors
  - Give the ability to collect information more frequently
  - The panel is hosted online and riders access the portal through the internet



The screenshot displays the homepage of the Ferry Riders' Opinion Group (F.R.O.G.). At the top left is a green frog logo. The main header features the text "FERRYRIDERS' OPINION GROUP" in green and blue, with the tagline "Jump on Board" and icons of a person and a boat. To the right is the Washington State Transportation Commission logo. The main content area is divided into three sections: a "Member Login" box on the left with fields for email and password, a "Welcome to the Ferry Riders' Opinion Group (F.R.O.G.)!" message in the center with a background image of a ferry, and a "JOIN NOW!" button on the right. The footer includes links for "Privacy Policy" and "Technical Support", and a "POWERED BY VISIONCRITICAL" logo.

**Member Login**

Please enter your login information below:

Email address:

Password:

☐ Remember me

[Forgot password?](#)

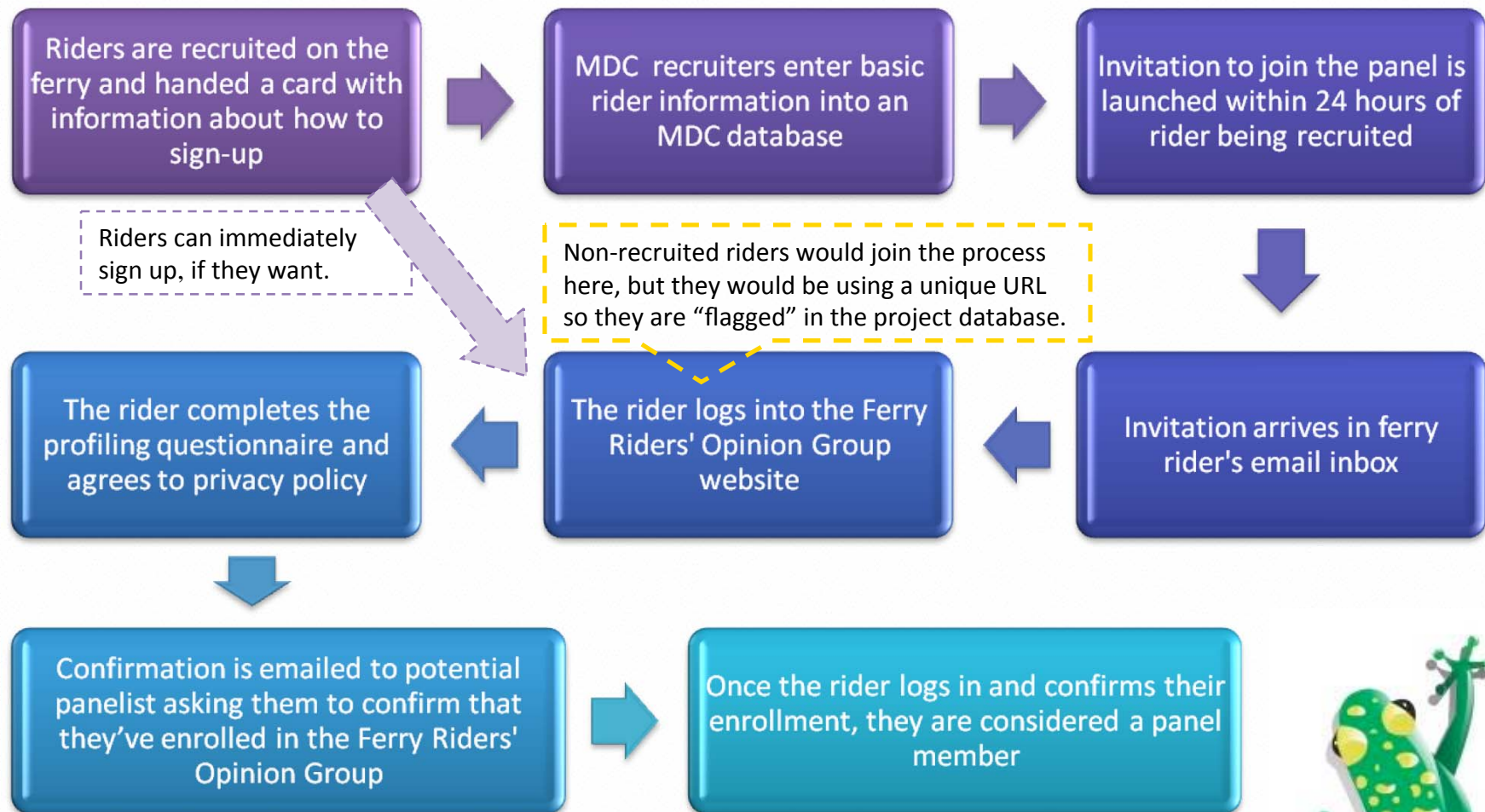
**Welcome to the Ferry Riders' Opinion Group (F.R.O.G.)!**

As a member of F.R.O.G. you get an opportunity to continually voice your opinions on important ferry issues. F.R.O.G. provides an outlet where you can share your travel behaviors, opinions and preferences as well as provide feedback on a number of operational and pricing strategies that are or may be considered by the state. It's your way to make your voice heard!

Privacy Policy | Technical Support

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# Panel Recruiting Process







# Recruiting Collateral

Washington State Transportation Commission

market decisions CORPORATION

**Make your voice heard and join the Ferry Riders' Opinion Group**  
*Jump on Board!*

The Washington State Transportation Commission invites you to join the **Ferry Riders' Opinion Group (F.R.O.G.)** and voice your opinions on important Ferry issues.

You can join F.R.O.G. in one of two ways:

1. Approach F.R.O.G. survey personnel who will be on board the boat for each route. They are administering a very short survey and giving instructions on how to join the survey group.

**OR**

2. Logon to [www.FerryRidersOpinionGroup.com](http://www.FerryRidersOpinionGroup.com)

It is important that your voice be heard, so *Jump on Board!*

For more information regarding the survey, please contact Market Decisions Corporation at 800-344-8725 or [ferryinfo@mdcproject.com](mailto:ferryinfo@mdcproject.com)

Poster to be placed on the ferries and in terminals

Postcards that will be handed to ferry riders who have agreed to be part of the panel

Washington State Transportation Commission

**FRONT**

market decisions CORPORATION

**Make your voice heard and join the Ferry Riders' Opinion Group**  
*Jump on Board!*



The Washington State Transportation Commission invites you to join the **Ferry Riders' Opinion Group (F.R.O.G.)** where you get an opportunity to voice your opinions on important Ferry issues.

To join the group, simply log on to <http://www.FerryRidersOpinionGroup.com>

For more information regarding the survey, please contact Market Decisions Corporation at 800-344-8725 or [ferryinfo@mdcproject.com](mailto:ferryinfo@mdcproject.com)

**BACK**

What is the Ferry Riders' Opinion Group?

The Legislature has directed the Washington State Transportation Commission to periodically conduct surveys of ferry customers, and the Commission will do so using this new survey group. F.R.O.G. is a group of ferry riders like yourself who have agreed to share their travel behaviors, opinions and preferences through occasional on-line surveys. These surveys will also be asking riders to provide feedback on a number of operational and pricing strategies that are or may be considered by the state.

Who will see my information?

Any personal identifying information is deleted from the data so that your personal information remains completely confidential. Your information will be grouped and analyzed with that of other ferry customers and survey results will only be presented in aggregate.

Why is my participation important?

Washington State's Ferry System is facing serious financial and operational challenges and that may affect your service. Your participation in F.R.O.G. and in subsequent surveys will be very important to developing informed solutions to guide the system's future.

# Panel Design

- ❖ **Panel size:** Approximately 13,500 panel members
  - Sufficient to conduct quantitative studies with sample sizes of 800 or smaller per route.
  - Most panels experience survey response rates of 35% or higher.
    - These rates will be based solely on a perceived “value” to engage panel members.
- ❖ **Design:** Panel will be representative of customer-base with regards to:
  - Ferry Route;
  - Rider Type (Recreational/Non-recreational/freight);
  - Boarding (Walk-on/Drive-on both driver and passenger);
  - Ride Times (On-peak/Off-Peak).
- ❖ **Customer Quotas:** We will utilize stratified sampling technique to assure adequate representation of ferry customers.
  - As needed the data will be weighted to be comparable to previous years findings.

Sample Frame	Routes										Total
	SEA/ BAIN	SEA/ BRE	EDM/ KIN	MUK/ CLI	FAU/ VAS	FAU/ SOU	PTD/ TAH	KEY/ PTT	ANA/ SAN	ANA/ SID	
Recreational	800	600	600	600	250	250	100	100	250	200	3,750
Non-recreational	800	600	600	600	250	250	100	100	250	200	3,750
<b>TOTAL</b>	<b>1,600</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>500</b>	<b>500</b>	<b>200</b>	<b>200</b>	<b>500</b>	<b>400</b>	<b>7,500</b>



# Panel Ownership & Management

- ❖ **Ownership**: MDC will establish the Customer Panel on behalf of WSTC; however, the panel, survey tools, database, survey results and any other panel elements will be owned by the WSTC.
- ❖ **Management**: Panel management software provided by Vision Critical, the leading provider of custom online panels and interactive research software.
- ❖ **Vision Critical Software**: Designed to create an easy and enjoyable experience.
  - Monitor panel health with diagnostic tools.
  - Track participation of groups and individuals over time.
  - Share study results with newsletters and respondent portals.
  - Administer incentives if offered.
  - Select sample based upon previous survey data and profiling questionnaire.
  - Create an engaging destination for your panelists and utilize “quick polling” - single questions that appear on the home page to get a quick read on panelist opinions.
  - Provide panelist with a deeper sense of membership by keeping content fresh.
  - Reinforce your brand with design that is tailored to match your look & feel.
  - Use point & click editing to keep content fresh for returning members.

# Panelist Interface



## Member Login

Please enter your login information below:

Email address:

Password:

☐ Remember me

[Forgot password?](#)

LOGIN

[Privacy Policy](#) | [Technical Support](#)



## Welcome to the Ferry Riders' Opinion Group (F.R.O.G.)!

As a member of F.R.O.G. you get an opportunity to continually voice your opinions on important ferry issues. F.R.O.G. provides an outlet where you can share your travel behaviors, opinions and preferences as well as provide feedback on a number of operational and pricing strategies that are or may be considered by the state. It's your way to make your voice heard!

JOIN NOW!



Dear Washington State Ferries rider,

**Thank you for your interest** in becoming part of the Washington State Transportation Commission's (WSTC) Ferry Riders' Opinion Group (F.R.O.G.).

Being a part of F.R.O.G. means you will have the **opportunity to voice your opinions and concerns on important ferry issues**. As a F.R.O.G. member, your voice will be part of a direct line of communication to the WSTC, Washington State Ferries, the Governor and the Legislature, influencing critical decisions that will impact ferry riders like yourself.

We will periodically contact members of F.R.O.G. via email to request your participation in short web surveys or online discussions on ferry related matters.

**The process of becoming a F.R.O.G. member is simple.** We will first ask you a series of get-to-know-you questions to gain a better understanding of who you are and how you use ferries. Once you have completed the registration process, we will send out a confirmation email within 24-48 hours. Please note that all information provided is confidential and the only contact we will have with you will be for research purposes.

To get started, please read, and if you agree, accept the non-disclosure agreement. Then complete the registration questionnaire, which follows. It should take no more than 5 to 10 minutes of your time.

We look forward to your participation in the F.R.O.G. survey group as **your opinions and insights will provide us with the information to maintain the quality and integrity of our state's ferry service**. Please note that should you decide to leave the F.R.O.G., you may do so at any time by sending an email to [support@ferryridersopiniongroup.com](mailto:support@ferryridersopiniongroup.com).

Sincerely,

Carol Moser, Chair  
Washington State Transportation Commission

Next

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# Ferry Customer Surveys

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# Ferry Customer Surveys

- ❖ The Winter & Summer Wave Ferry Customer surveys are the vehicles to be used to collect the data that our analyses will use to determine:
  - Demographic, behavioral, and psychographic characteristics of WSF riders
    - Age, gender, income, educational attainment, employment, and other relevant demographic characteristics
    - Frequency of riding by market and usage segment
    - Trip purpose(s)
    - Boarding mode(s)
    - Emotional drivers of attitude and behavior
  - Attitudes of WSF customers towards the WSF system and its operations
    - Motivational aspects that would impact WSF usage and the change from the baseline study within each customer/market segment
    - Specific tradeoffs among the motivational aspects that will impact WSF usage for each market/usage segment
    - Impacts on customer route choice of different pricing and operational strategies
  - Elasticity of demand
  - Specific tradeoffs, among the motivational aspects, that will impact WSF usage for each market/usage segment and to determine their change from the baseline study
  - Specific tradeoffs that might be used to engender shifts in boarding mode
  - Other relevant informational objectives as determined by the Commission





# Elasticity of Demand

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# Elasticity of Demand

❖ **Choice-Based Conjoint (CBC)**: An ideal method of measuring elasticity, CBC is used to study the relationship between price, availability, and other factors and demand.

- Especially useful when:
  - Relationship differs from brand to brand (in the case of this study, the “brands” being the various ferry routes)
  - When only a few features need to be considered.
- One of the strengths of CBC is its ability to deal with interactions, such as when different “brands” - the ferry routes - have different sensitivities to changes in price or other factors.

❖ **Data Analysis**: CBC data can be analyzed in a number of ways.

- The relative impact of each attribute level can be assessed by counting “wins.”
- Multinomial logit estimation results in a set of conjoint “utilities,” describing preferences of a group rather than for an individual.





# General Public Research

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# General Public Research

- ❖ **Methodology**: Phone survey is the best way to conduct a general market survey yielding a random and representative segment of service area.
  - Ensures valid, unambiguous results
  - Allows direct, controllable contact with each respondent
  - Minimizes non-response bias
  - Permit probing and clarifying on particularly important questions
  
- ❖ **Sampling**: Random probability sampling ensures the best possible representation of those in the community, allowing the results to be projected to the universe.
  - Ensures the inclusion of both listed and unlisted telephone numbers
  - Population proportionate
  
- ❖ **Study Design**: A total of 1200 interviews, 400 per segment, will be collected.
  - Quotas will be established in order to achieve a representative, population proportionate sample of Puget Sound area, ensuring a gender, age and geographically balanced sample
    - Sample will be split 50%/50% by gender
    - Age quota established to ensure the age breakout of the sample approximates the actual population
    - Oversampling of youth and elderly quotas may be necessary (results then weighted)
    - Geographic quotas by areas of Puget Sound may be necessary
  - Data will be collected on weeknights and during the day on weekends





## Task 5: Mode Shift Research (Tradeoff)

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# Mode Shift Research (Tradeoff)

- ❖ **Trade-off analysis**: MDC has developed a new approach to trade-off analysis, based on the Bradley-Terry method, that allows the use of simple ranking exercises to determine the relative importance of (or preference for) product or service features or attributes.
  
- ❖ **Trade-off Design**: The Mode Shift research, incorporated into the design of the conjoint exercise (Task 3), will be understood in the context of the demand elasticity's of the system, allowing for the modeling of WSF customer responses to change in the balance of factors represented in the conjoint design. These factors are expected to include (but are not limited to):
  - Pricing
  - Level of Service (Wait times)
  - Operational aspects
  - Extrinsic factors (e.g., environmental stewardship, conservation, etc.)





# Freight Customer Research

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# Freight Customer Research

- ❖ **Methodology**: For business-to-business research within the transportation industry, a phone methodology is most appropriate.
  - This audience is often found within the shipping/logistics department and they are used to being on the phone; often preferring phone to other means of communication.
  - Ensures valid, unambiguous results
  - Allows direct, controllable contact with each respondent
  - Minimizes non-response bias
  - Permit probing and clarifying on particularly important questions
- ❖ **Sampling**: A random sample will be drawn from a Dunn & Bradstreet list of Puget Sound area businesses with truck fleets.
- ❖ **Study design**: 100 surveys will be completed.
  - Quotas may be established to ensure we reach a proportionate number of small, medium and large organizations from different areas of town
  - After the initial contact and survey, the respondent will be invited to participate in the panel